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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,673	11/29/2001	Mou-Chung Ngai	PGI6044P0231US	4596
32116	7590	03/29/2004	EXAMINER	
WOOD, PHILLIPS, KATZ, CLARK & MORTIMER 500 W. MADISON STREET SUITE 3800 CHICAGO, IL 60661			PIERCE, JEREMY R	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/997,673

Applicant(s)

NGAI, MOU-CHUNG

Examiner

Jeremy R. Pierce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-28 is/are pending in the application.
- 4a) Of the above claim(s) 21-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed on February 24, 2004 has been entered. Claims 16-20 have been cancelled, rendering previous rejections against those claims moot. New claims 21-28 have been added. Upon further consideration, the Examiner withdraws the previous 112 1<sup>st</sup> paragraph rejections for non-enablement set forth in section 5 of the last Office Action and the 112 2<sup>nd</sup> paragraph rejections for indefiniteness set forth in section 8 of the last Office Action because binders by their nature enhance fabric integrity and any binder used would enhance surface abrasiveness. Therefore, a person skilled in the art would understand that the addition of binder would enhance surface abrasiveness.

### ***Election/Restrictions***

2. Newly submitted claims 21-27 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Claims 21-27 are related to claim 28 as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case providing a needled fibrous matrix rather than a hydroentangled fibrous matrix can make the nonwoven fabric wipe.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 21-27 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 28 is rejected under 35 U.S.C. 102(e) as being anticipated by Anderson et al. (U.S. Patent No. 6,103,061).

Anderson et al. disclose a hydraulically entangled nonwoven fabric comprising two layers and a bonding material applied to one side of the web (column 2, lines 28-36). The binding material may be applied by spraying (column 13, lines 5-7) in a pre-selected pattern (column 14, lines 38-59).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. in view of Buyofsky et al. (U.S. Patent No. 4,810,568).

Anderson et al. do not disclose an intermediate layer between the first and second layers. Buyofsky et al. disclose a nonwoven composite used as a wipe with excellent abrasion resistance, dimensional stability, and absorbency (column 1, lines 47-60). Two entangled layers are coated with an abrasive binder, and then laminated together with a thermoplastic reinforcement layer in-between, which offers dimensional stability to the composite (column 2, lines 36-64). It would have been obvious to one having ordinary skill in the art to use a reinforcement layer in the nonwoven composite of Anderson et al. in order to increase the dimensional stability of the composite, as taught by Buyofsky et al. Anderson et al. do not teach the binder material abates from one layer to the next.

7. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. in view of Wagner et al. (U.S. Patent No. 5,951,991)

Anderson et al. teach using pigment in the binder composition (column 13, line 23), but do not disclose the binder should have a different color than the other surface.

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Wagner et al. teach that the use of different colors in a wipe can help the user distinguish the surfaces (column 8, lines 41-42). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use different color binder in the material of Anderson et al. in order to allow a user to easily distinguish the surfaces of the wipe, as taught by Wagner et al.

8. Claim 28 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Welch et al. (U.S. Patent No. 6,022,818) in view of Wong et al. (U.S. Patent No. 5,213,588).

Welch et al. disclose a hydroentangled nonwoven fabric formed from two different fiber sources (column 2, lines 34-37). One surface is made of matrix fibers, such as polyester (column 2, line 51), and the other surface is made of absorbent fibers, such as cellulosic fibers and rayon (column 4, lines 38-40). Welch et al. do not teach applying an abrasive coating to the fabric for cleansing purposes. Wong et al. disclose adding abrasive particles in a coating to nonwoven wiping materials to enhance soil and stain removal performance (column 1, lines 64-68). Wong et al. further suggest that the abrasive coating of their invention can be applied to any conventionally fashioned nonwoven sheet with suitable characteristics (column 3, lines 65-68). It would have been obvious to one having ordinary skill in the art to apply the abrasive coating provided by Wong et al. to the nonwoven fabric taught by Welch et al. in order to create a cleaning wipe with enhanced soil and stain removing properties. Wong et al. disclose applying the abrasive coating in a pattern onto the nonwoven fabric (column 2, lines 52-55). Additionally, Wong et al. disclose adding a green dye to the binder composition (see Example IV in column 19). Welch et al. disclose a second layer of

synthetic matrix fibers can be added to the first layer of matrix fibers, thus making the first layer an intermediate layer.

### ***Response to Arguments***

9. Applicant's arguments filed on February 24, 2004 have been fully considered but they are not persuasive.

10. Applicant argues that the definition of binder in this case is "a substance added to form dry ingredients into a solid mass." The Examiner agrees with Applicant's assertion that not every material that adheres to a fabric substrate, such as an ink stain, is binder. The 112 rejections have been withdrawn, as set forth above.

11. Applicant then argues that Anderson adds the bonding material to soften the fibrous web. However, support for Applicant's argument is not found in the Anderson et al. reference. The Anderson et al. reference meets Applicant's claims because it contains a binder. In the art of nonwoven fabrics, a binder is used to enhance fabric integrity (by bonding the fibers together), which results in a more abrasive texture. Thus, the addition of binder to the fabric of Anderson et al. would enhance surface abrasion, even if the degree of abrasion is increased only a small amount. Applicant has not defined what the binder is in the claims, nor has Applicant defined how abrasive a fabric must be in order to meet the claim limitations. Binder enhances surface abrasion to some degree, so Anderson et al. anticipates the claim.

12. Applicant argues that the claims do not call for or involve adding abrasive particles in a coating. Applicant has amended the claims so that "only a binder

composition" is applied to one of the surfaces. However, this limitation still does not preclude the use of abrasive particles. A "composition" means that the binder is formed of at least two ingredients, by the definition of what a "composition" is. Abrasive particles may be mixed with the binder to form a "binder composition." Applicant has not sufficiently defined the binder composition in either the claims or the specification to negate the presence of abrasive particles.

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (571)



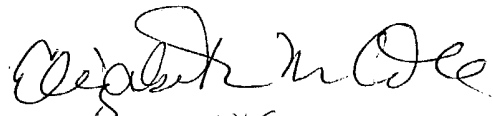
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272-1479. The examiner can normally be reached on Monday-Thursday 7-4:30 and alternate Fridays 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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JRP

  
ELIZABETH M. COLE  
PRIMACY EXAMINER